tests and/or test criteria will be specified by the Commandant.

 $[{\rm CGD}\ 73\text{--}254,\ 40\ {\rm FR}\ 40164,\ {\rm Sept.}\ 2,\ 1975,\ as$  amended by USCG-2000-7790, 65 FR 58460, Sept. 29, 2000]

#### §54.05-25 [Reserved]

### §54.05–30 Allowable stress values at low temperatures.

- (a) The Coast Guard will give consideration to the enhanced yield and tensile strength properties of ferrous and nonferrous materials at low temperature for the purpose of establishing allowable stress values for service temperature below 0  $^{\circ}$ F.
- (b) The use of such allowable stress values must be specially approved by the Coast Guard for each application. Further information may be obtained by writing to the Coast Guard (G-MSF).
- (c) Submittals must include information and calculations specified by the Coast Guard (G-MSE) to demonstrate that the allowable stress for the material cannot be exceeded under any possible combination of vessel loads and metal temperature.

[CGD 73-133R, 39 FR 9179, Mar. 8, 1974, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983; CGD 95-072, 60 FR 50462, Sept. 29, 1995; CGD 96-041, 61 FR 50727, 50728, Sept. 27, 1996]

#### Subpart 54.10—Inspection, Reports, and Stamping

# § 54.10-1 Scope (modifies UG-90 through UG-103 and UG-115 through UG-120).

(a) The inspection, tests, stamping, and reports for pressure vessels shall be as required by paragraphs UG-90 through UG-103 and UG-115 through UG-120 of the ASME Code except as noted otherwise in this subpart.

## §54.10-3 Marine inspectors (replaces UG-90 and UG-91, and modifies UG-92 through UG-103).

- (a) Only marine inspectors shall apply the Coast Guard Symbol. They will not apply any other code symbol to pressure vessels.
- (b) All pressure vessels not exempted under provisions of §54.01-15 shall be inspected by a marine inspector referring to procedures outlined in UG-92

through UG-103 of the ASME Code and §§ 50.30-10, 50.30-15, and 50.30-20 of this subchapter. The marine inspector will then stamp the vessel with the Coast Guard Symbol.

(c) Pressure vessels described in §54.01–5(c)(3), except pressure vessels in systems regulated under §58.60 of this chapter, must be visually examined by a marine inspector prior to installation. The marine inspector also reviews the associated plans and manufacturers' data reports. If, upon inspection, the pressure vessel complies with the applicable requirements in §54.01–5, the marine inspector stamps the pressure vessel with the Coast Guard Symbol.

[CGFR 68-82, 33 FR 18828, Dec. 18, 1968, as amended by CGD 77-147, 47 FR 21810, May 20, 1982]

## § 54.10-5 Maximum allowable working pressure (reproduces UG-98).

- (a) The maximum allowable working pressure for a vessel is the maximum pressure permissible at the top of the vessel in its normal operating position at the operating temperature specified for that pressure. It is the least of the values found for maximum allowable working pressure for any of the essential parts of the vessel by the principles given in paragraph (b) of this section and adjusted for any difference in static head that may exist between the part considered and the top of the vessel. (See UA-60 (a) of the ASME Code.)
- (b) The maximum allowable working pressure for a vessel part is the maximum internal or external pressure, including the static head thereon, as determined by the rules and formulas in this Division (ASME Code), together with the effect of any combination of loadings listed in UG-22 of the ASME Code (see §54.01-30) which are likely to occur, for the designated coincident operating temperature, excluding any metal thickness specified as corrosion allowance. (See UG-25 of the ASME Code.)
- (c) Maximum allowable working pressure may be determined for more than one designated operating temperature, using for each temperature the applicable allowable stress value.

NOTE: Table 54.10-5 gives pictorially the interrelation among the various pressure